9STATE OF MARYLAND
DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

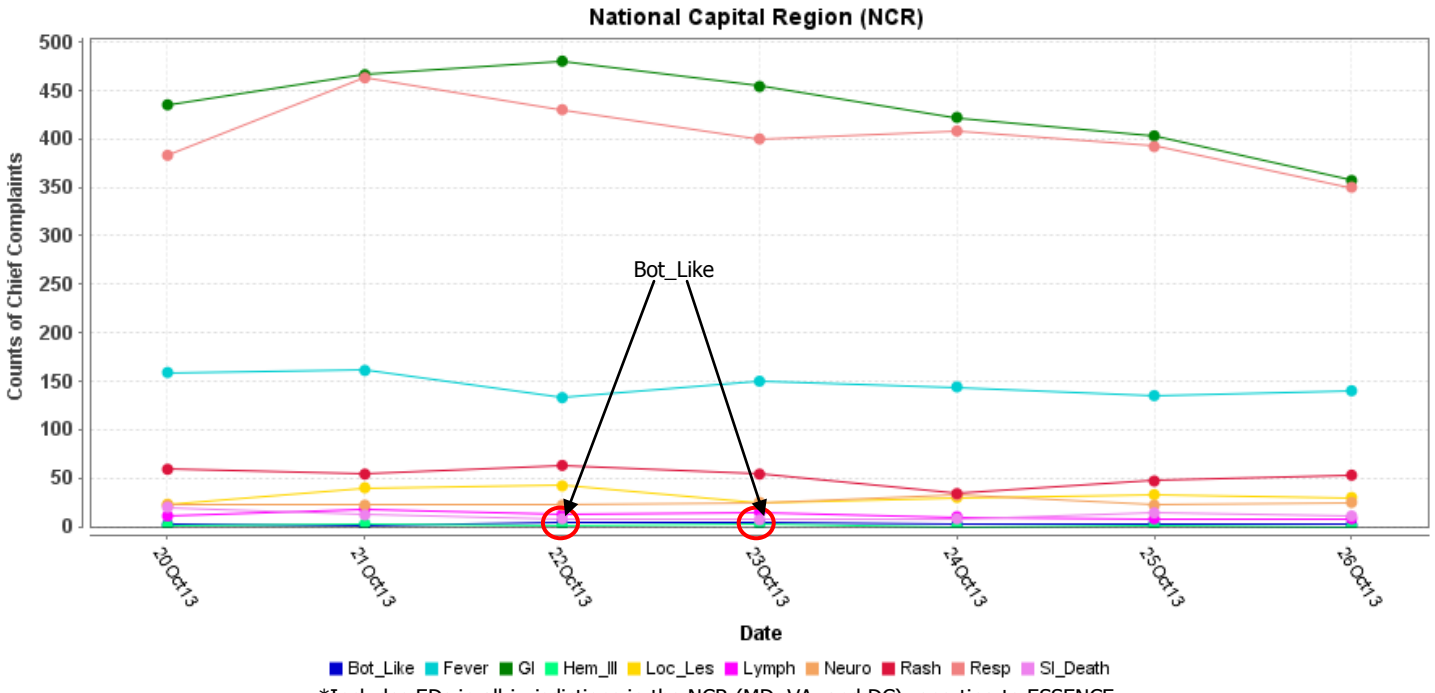
November 1, 2013

Public Health & Emergency Preparedness Bulletin: # 2013:43
Reporting for the week ending 10/26/13 (MMWR Week #43)

CURRENT HOMELAND SECURITY THREAT LEVELS

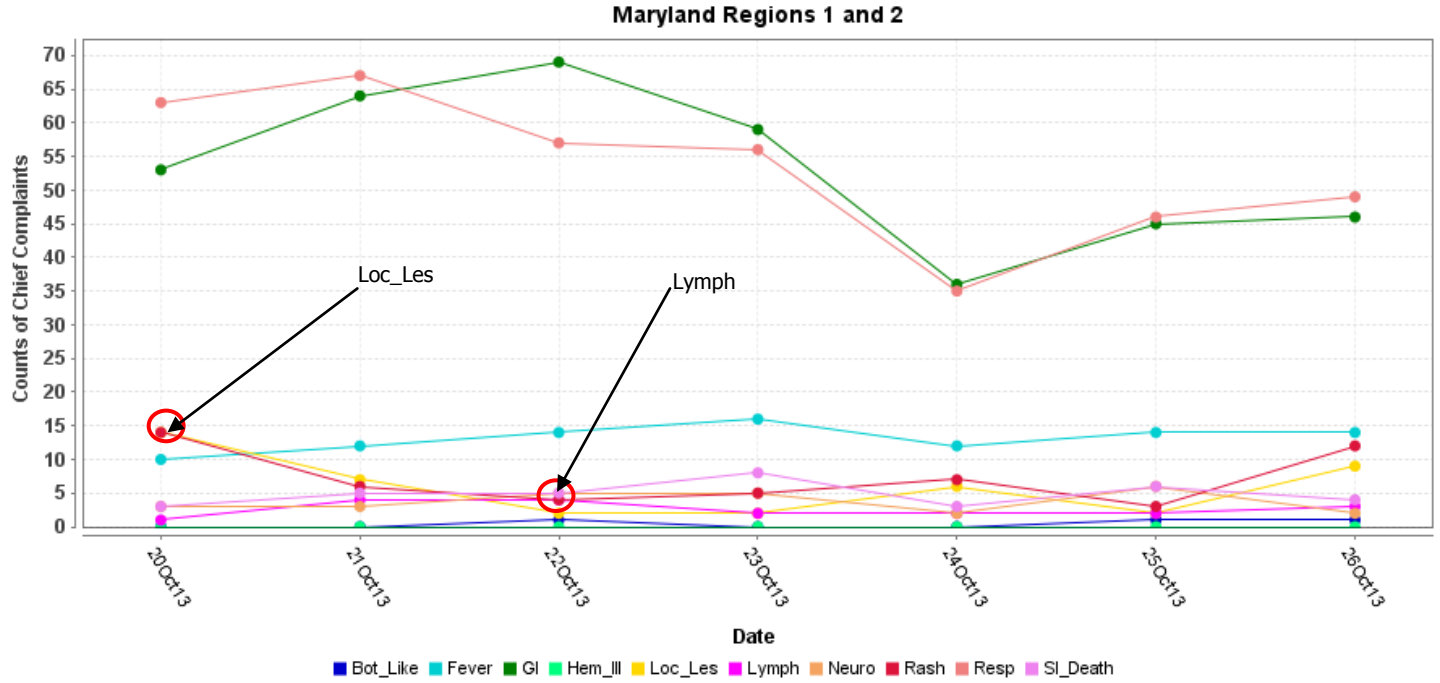
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

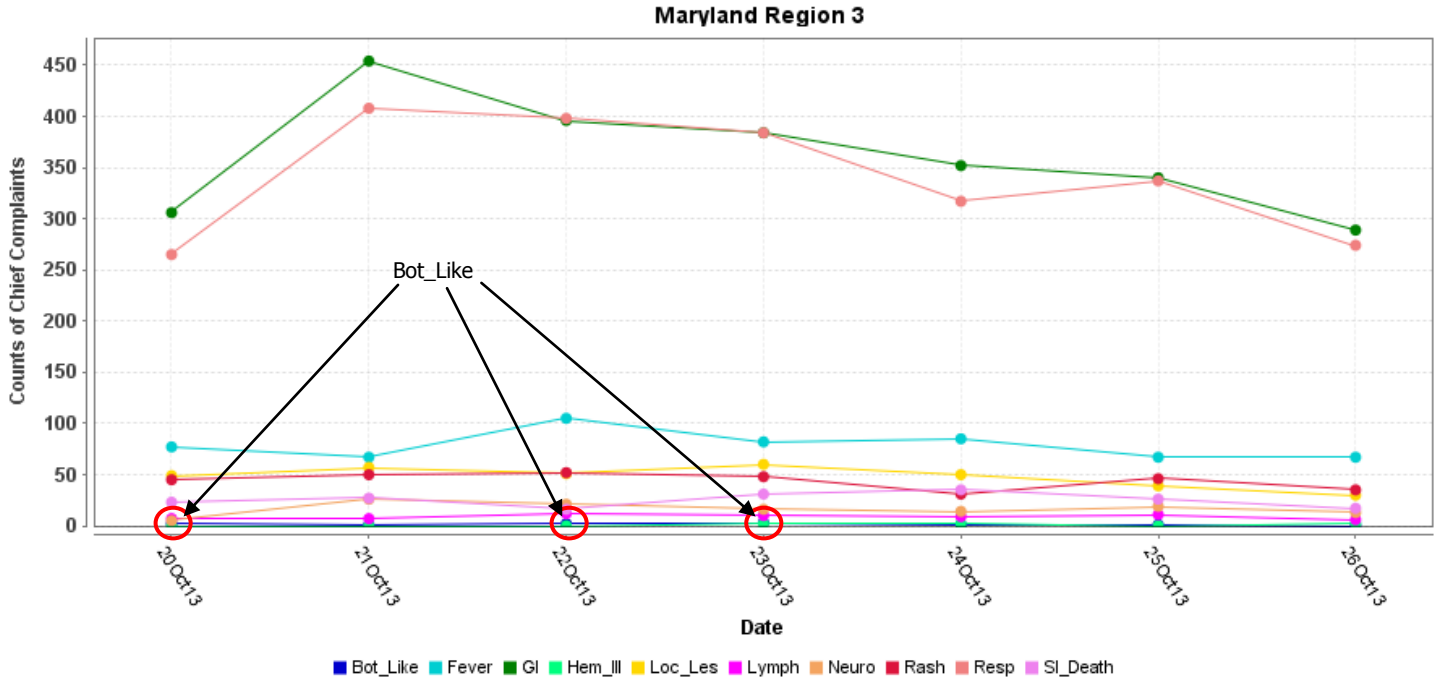


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

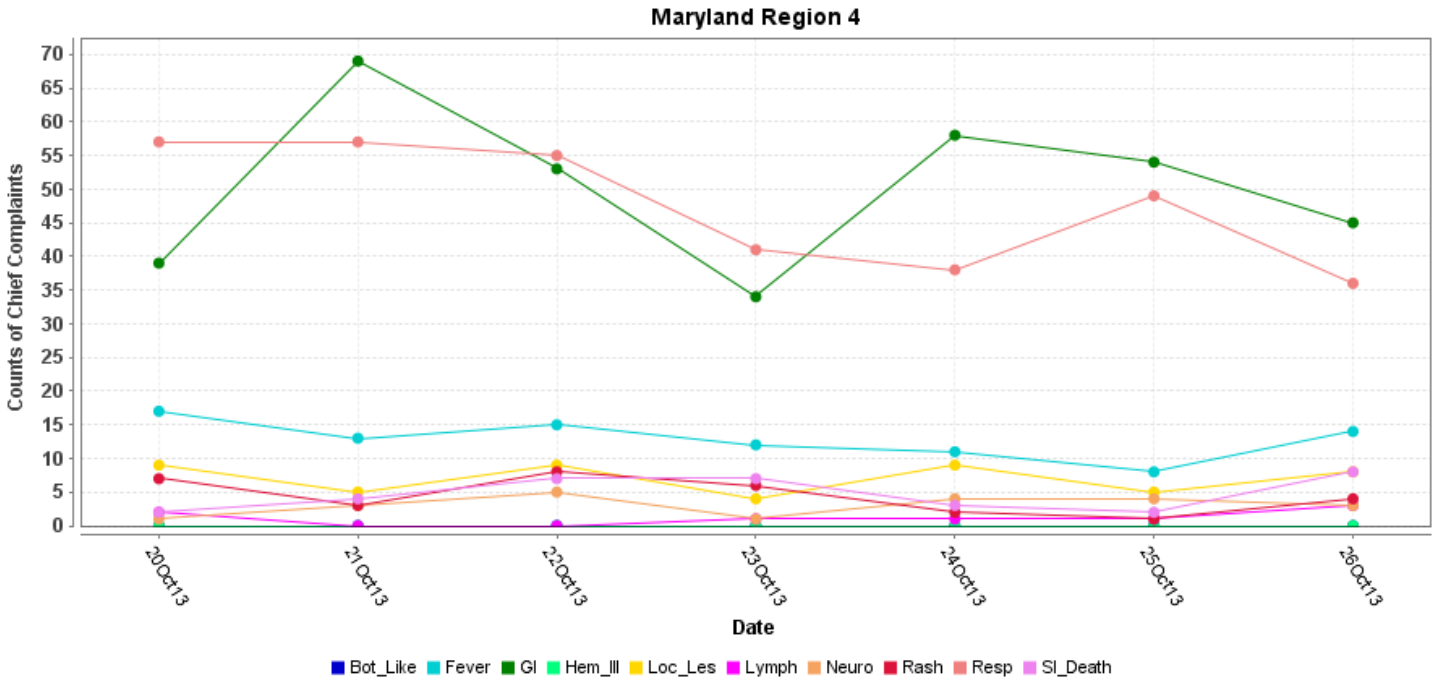
MARYLAND ESSENCE:



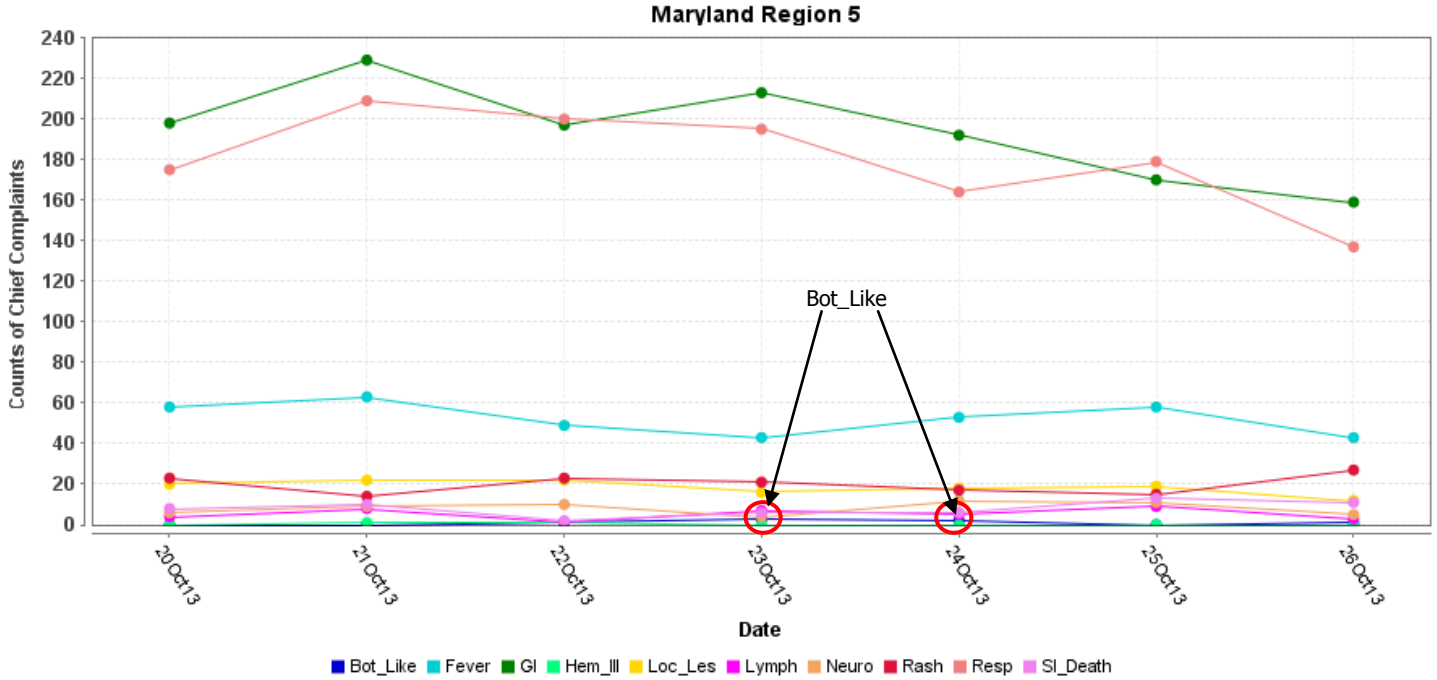
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



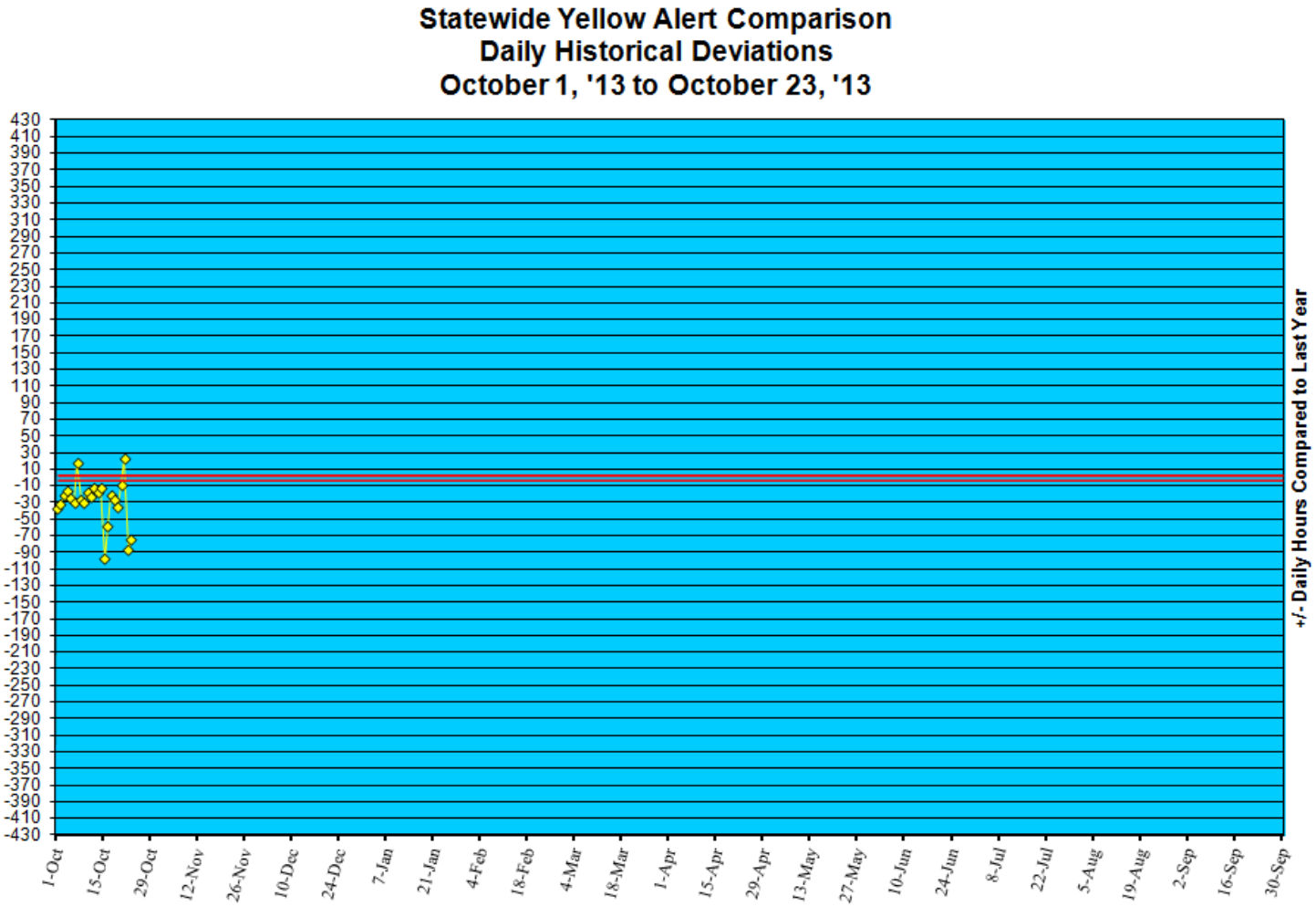
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in September 2013 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (October 20 - October 26, 2013):	23	0
Prior week (October 13 - October 19, 2013):	9	0
Week#42, 2012 (October 22 – October 28, 2012):	16	0

0 outbreaks were reported to DHMH during MMWR Week 43 (October 20 - October 26, 2013)

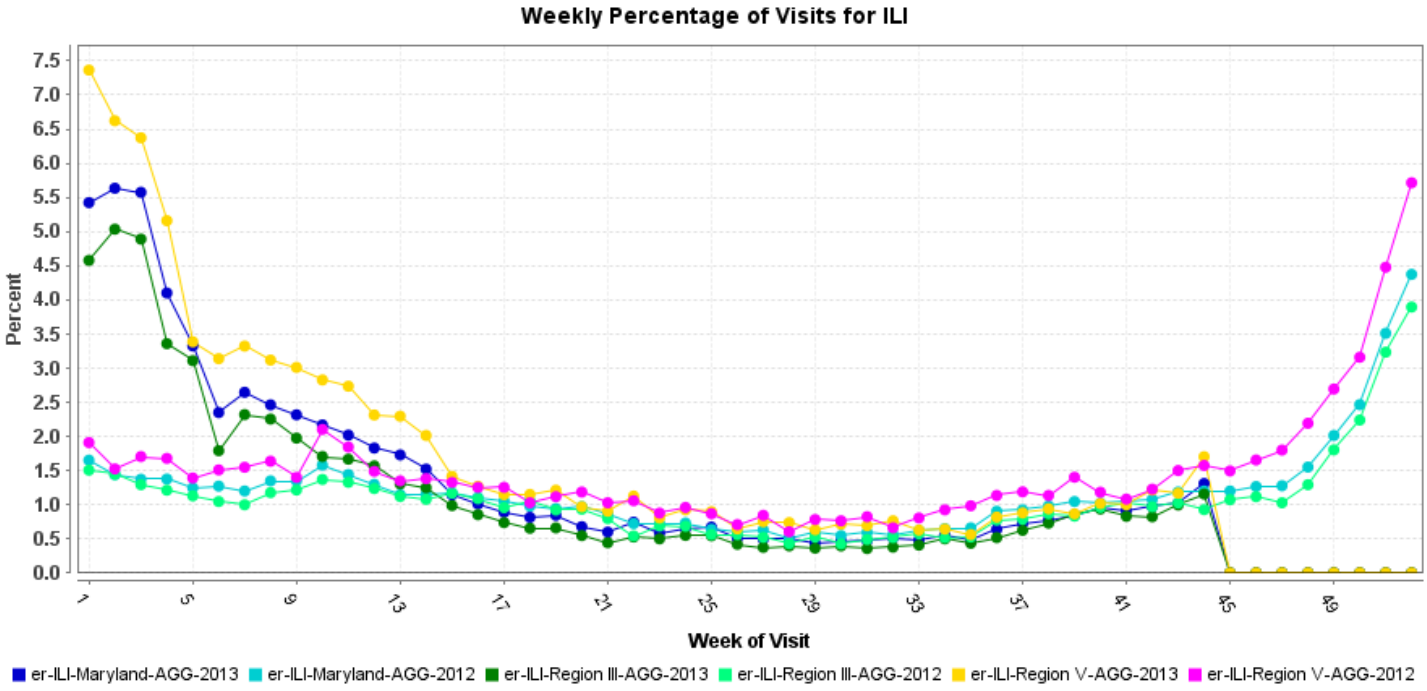
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 41 was: No Activity with Minimal Intensity

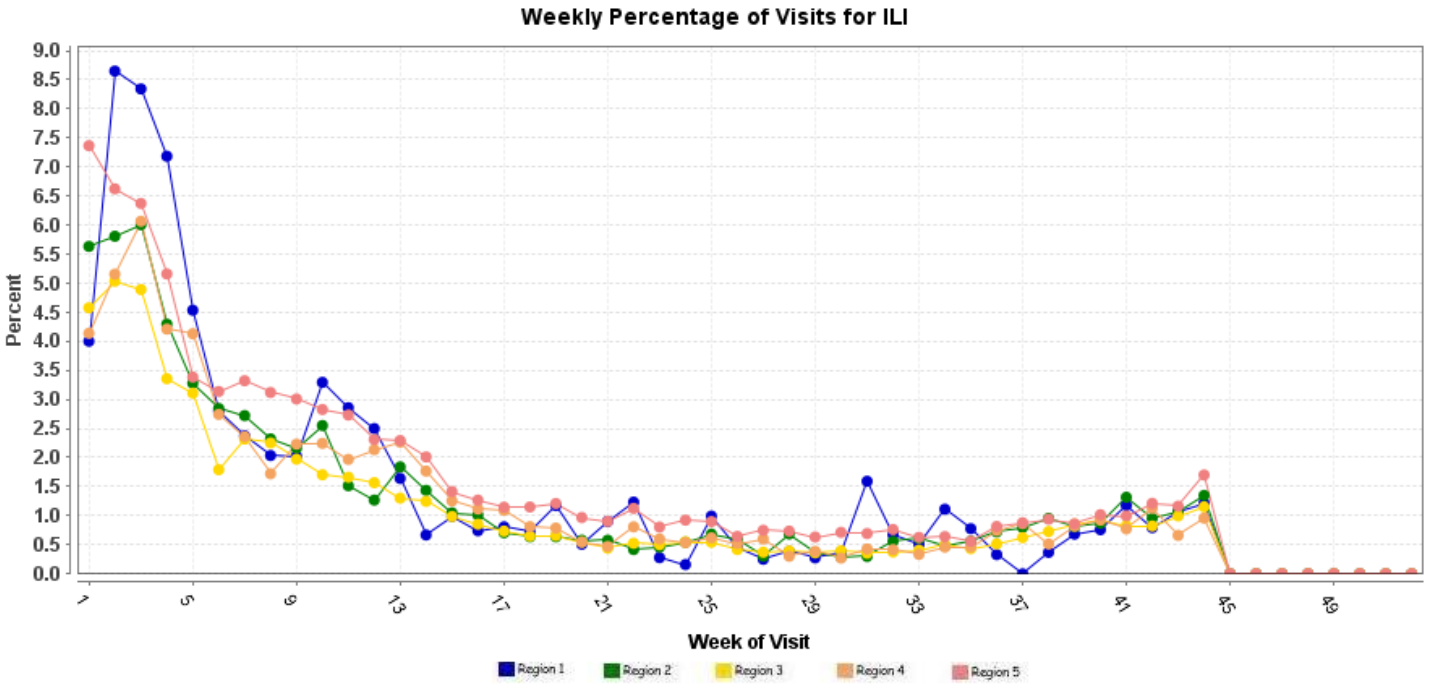
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



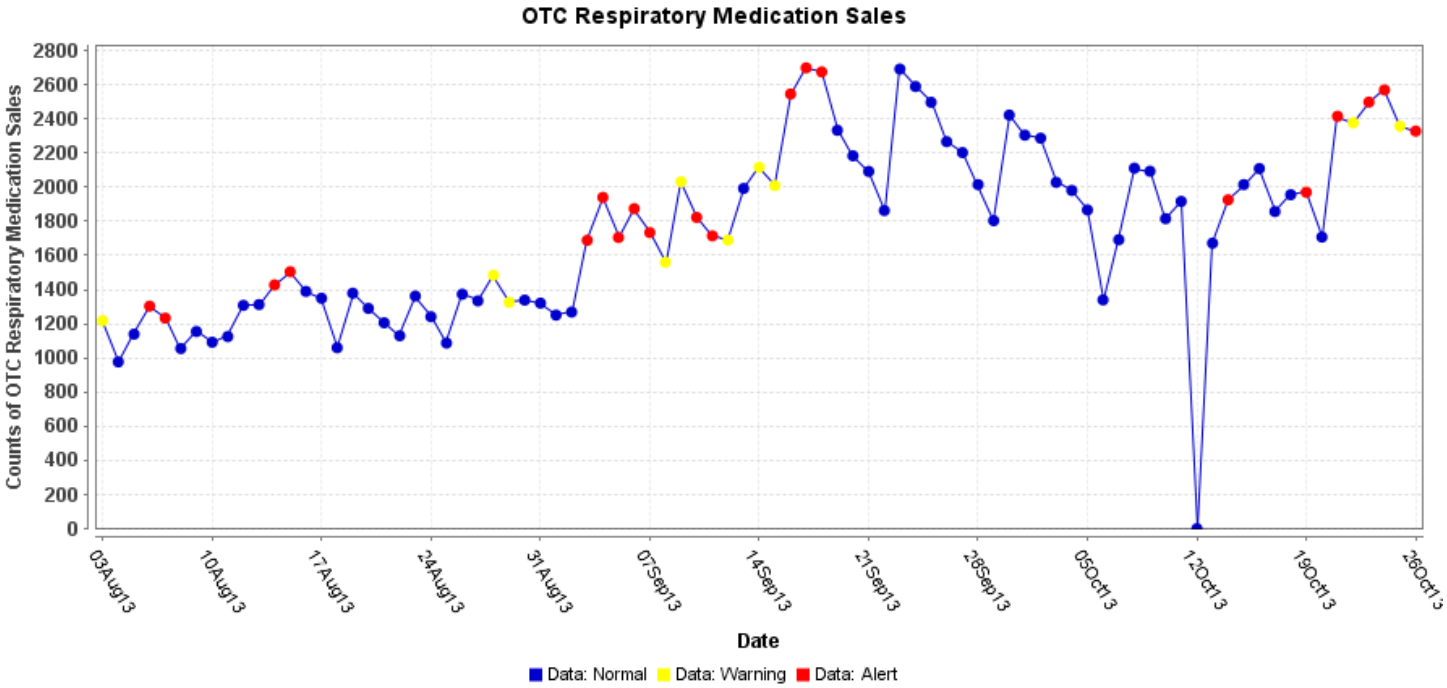
* Includes 2012 and 2013 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2013 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of October 8, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 641, of which 380 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA, HUMAN, H7N9: 24 October 2013, A new human H7N9 bird flu case was reported on Wednesday [23 Oct 2013] in east China's Zhejiang Province, the 2nd in China this autumn [2013], according to the provincial health authority. The 67 year old patient tested positive for the virus at the Zhejiang Provincial Center for Disease Control and Prevention, said a statement by the provincial authorities. The patient, a farmer from the city of Jiaxing, first showed flu symptoms on 16 Oct 2013. He is now in a serious condition and receiving treatment at a local hospital. His is the 2nd H7N9 case in China this month [October 2013]. The 1st, reported on 15 Oct 2013, was also in Zhejiang. This patient, a 35 year old man from Shaoxing county, remains in a critical condition. H7N9 bird flu cases in China reached 134 by the end of August [2013], with 45 fatalities, according to the National Health and Family Planning Commission. No new cases were reported on the Chinese mainland in September [2013].

AVIAN INFLUENZA, HUMAN, H5N1 (CAMBODIA): 23 October 2013, The Ministry of Health (MoH) of the Kingdom of Cambodia wishes to advise members of the public that one new human case of avian influenza has been confirmed for the H5N1 virus. This is the 21st case this year [2013] and the 42nd person to become infected with the H5N1 virus in Cambodia. Of the 42 confirmed cases, 31 were children under 14, and 25 of the 42 were female. In addition, only 10 cases out of the 21 cases this year [2013] survived. The 21st case, an 8 year old girl from O-Raing village, Pung Ror commune, Baray district in Kampong Thom province confirmed positive for human H5N1 avian influenza on [17 Oct 2013] by Institut Pasteur of Cambodia. The girl developed fever on [8 Oct 2013], together with sneezing. On [9 Oct 2013], her parents sought treatment for her in the village clinic. On [10 Oct 2013], the girl developed a cough together with fever and vomiting and her parents sought treatment for her outside the village at a private clinic in Taing Kor in Kampong Thom province. On [11 Oct 2013], the girl's condition worsened and the private clinic referred her to the Jayavarman VII Hospital in Siem Reap [province]. The girl was admitted to the Jayavarman VII Hospital, on [11 Oct], with fever, cough, vomiting, and dyspnea. Laboratory samples were taken on [11 Oct] and [14 Oct 2013] and Tamiflu [oseltamivir] administered on [14 Oct 2013]. The girl is currently in a stable condition. Investigations by the Ministry of Health's Rapid Response Teams (RRT) in O-Raing village revealed that the girl had come into direct contact with dead poultry when she helped prepare a meal from a chicken that had died earlier. The Ministry of Health's RRTs and the Ministry of Agriculture, Forestry and Fishery's Animal Health Task Force are working together closely in O-Raing village in Kampong Thom to investigate and implement control measures. The RRTs are trying to identify the cases' close contacts, any epidemiological linkage among the 21 cases and initiate preventive treatment as required. The Animal Health Task Force is investigating cases of poultry deaths in the villages. "Avian influenza H5N1 remains a serious threat to the health of all Cambodians and more so for children, who seem to be most vulnerable and are at high risk. There have been 21 cases of H5N1 infection in humans this year [2013]. Children often care for domestic poultry by feeding them, cleaning pens, and gathering eggs. Children may also have closer contact with poultry as they often treat them as pets and also seem to be most vulnerable and are at high risk because they like to play where poultry are found. I urge parents and guardians to keep children away from sick or dead poultry and prevent them from playing with chickens and ducks. Parents and guardians must also make sure children thoroughly wash their hands with soap and water before eating and after any contact with poultry. Hands may carry the virus that cannot be seen by the naked eye. Soap cleans the virus on hands. If children have fast or difficult breathing, their parents should seek medical attention at the nearest health facility and attending physicians must be made aware of any exposure to sick or dead poultry," said HE Dr. Mam Bunheng, minister of health. A nationwide public health education campaign using radio has been launched in early October [2013]. Also, public health education campaigns are being conducted in O-Raing village in Kampong Thom using information, education, and communications materials to inform families on how to protect themselves from contracting avian influenza. The government's message is, wash hands often with soap and water, before eating and after coming into contact with poultry; keep children away from poultry; keep poultry away from living areas; do not eat dead or sick poultry; and all poultry eaten should be well cooked. H5N1 influenza is a [virus] that normally spreads between sick poultry, but it can sometimes spread from poultry to humans. Human H5N1 avian influenza is a very serious disease that requires hospitalization. Although the virus currently does not easily spread among humans, if the virus changes it could easily be spread like seasonal influenza. Hence, early recognition of cases is important.

NATIONAL DISEASE REPORTS*

There are no national disease reports this week.

INTERNATIONAL DISEASE REPORTS*

TRICHINELLOSIS (CANADA): 26 October 2013, Health officials in Nunavik [region, Quebec], are trying to figure out the source of a trichinellosis outbreak in Inukjuak [Nunavik]. Since early October [2013], about 15 people have exhibited symptoms of the illness caused by a parasite sometimes found in raw meat of animals Including walrus and polar bear. 2 people have been hospitalized. Health officials are baffled because there's no evidence that the parasite came from walrus meat, which is most often the cause for an outbreak. Dr. Jean-Francois Proulx, who works for public health in Kuujjuaq, says Inukjuak has had a walrus meat testing program since the 1990s. Walrus meat harvested recently was tested and came back negative. And, he says, the parasite had made people sick even before walrus was harvested and consumed in the community. "It's a challenge to come to a final

answer in such a context but we think that it's important to document as much as we can -- all potential avenues -- in order to contribute to further knowledge on this very rare disease," he said. Proulx says the investigation will continue, but it could take a while. In the meantime, officials are advising people to fully cook meat before eating it, to kill any parasites. Proulx says the 2 people recently hospitalized seem to be recovering. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CHOLERA (NIGERIA): 24 October 2013, Three people have been confirmed dead as a cholera outbreak hits Lagos. The Lagos State Government in a prompt response has moved to stop the spread of the disease. At an emergency news conference at the Lagos State Government Secretariat, Alausa, in Ikeja, Lagos, Southwest Nigeria on Wednesday [23 Oct 2013], commissioner for health Dr. Jide Idris confirmed that 13 cases of cholera infection had been reported and that 3 people have died so far while some had been treated and discharged from the hospital. Idris explained that investigations carried out by the ministry had revealed that the suspected cases recorded were contracted from food sources such as the African food salad popularly called 'Abasha', well-water sources, especially in areas like Ikare community, Amuwo-Odofin Local Government area and Badia area of Apapa Local Government area, and other infected foods from food sellers, and other unhygienic habits. Other suspected areas are Ajeromi, Lagos Island, Oshodi-Isolo and Surulere Local Government. He urged members of the public to be vigilant and report any suspected case to the nearest health facility and the Directorate of Disease Control in the state Ministry of Health. Idris described cholera as an acute contagious bacterial disease that is characterized by severe form of sudden onset of profuse painless watery stools, nausea, and profuse vomiting. He added that cholera is acquired through the ingestion of an infective dose of contaminated food or water and could be transmitted through many mechanisms like direct or indirect contamination of water or food by faeces of infected individuals. "Cholera should be suspected in any person who develops diarrhoea with or without vomiting, weakness, restlessness, irritability, dry mucous membranes, low blood pressure, leg cramps, excessive loss of body fluids (dehydration), or dies from frequent stooling, hence, adequate measures should be taken in order to reduce the risk of contracting the disease," he stated. The commissioner listed measures to be taken to reduce the risk of contracting the disease as washing of hands with soaps and water frequently and thoroughly; boiling of water before drinking if the source of the water was in doubts; washing of fruits and vegetables thoroughly before eating; cooking of food thoroughly before eating; disposing of waste material properly; and keeping of water containers clean. Idris pointed out that in the case of suspected cholera, members of the public should prepare oral rehydration solution (10 level teaspoonfuls of sugar and one level teaspoonful of salt in two 35cl bottles); give the patient a lot of fluids to drink; keep giving the patient food as soon as it can be tolerated; and thereafter visit the nearest hospital whether the condition of the patient improves or not. He urged health workers to be on the alert and report suspected outbreaks of more than 5 cases in their facilities to the State Ministry of Health, saying that people could also call the following numbers: 08023169485 or 0802321333 for assistance. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CRIMEAN-CONGO HEMORRHAGIC FEVER (PAKISTAN): 23 October 2013, A patient who had symptoms of Crimean-Congo hemorrhagic fever (CCHF) died on Tuesday [22 Oct 2013] in Lahore. CCHF is a tickborne viral disease which is mainly transferred to humans from pets. Its symptoms include fever, bloody urine, vomiting, and nose bleeding. 30 per cent of the cases result in death on the 2nd week of the illness. According to [local] sources, a 31 year old person, a suspected case of CCHF, was under treatment at a private clinic in the Ferozepur Road area of Lahore. He was brought to the hospital 5 days ago but died of the illness. The doctors said that blood samples of the patient have been sent to the National Institute of Health. A family member said the man's health destabilized after he visited a local cattle market to purchase a sacrificial animal. This was the 1st death caused by CCHF in Punjab; however, the provincial Health Department has not, so far, confirmed diagnosis of the cause of death officially. (Viral Hemorrhagic Fever is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable